

20/586669

Rec'd PCT/PTO 20 JUL 2006

1/32

SEQUENCE LISTING

<110> FIVE PRIME THERAPEUTICS INC.

<120> PHARMACEUTICAL COMPOSITIONS CONTAINING ANTAGONISTS TO
LRP4, LRP8 OR MEGALIN FOR TREATMENT OF DISEASES

<130> 8940-0033.00304

<140> PCT/US05/01883

<141> 2005-01-21

<150> 60/538,322

<151> 2004-01-21

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<170> PatentIn Ver. 3.3

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Gly Ala Val Gln Cys Thr Cys His Thr Gly Tyr Arg Leu Thr Glu Asp
20 25 30
Gly His Thr Cys
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<400> 29
Cys Ala Met Glu Asn Gly Gly Cys Ser His Leu Cys Leu Arg Ser Pro
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20 25 30
Ser Asp Gly Lys Thr Cys
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Ser Gly Phe Ser Cys Ala Cys Pro Thr Gly Ile Gln Leu Lys Gly Asp
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Gly Lys Thr Cys
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<210> 31
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 Leu Cys Asn Gly Val Asn Asp Cys Gly Asp Asn Ser Asp Glu Ser Pro
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 Gln Gln Asn Cys Arg Pro
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<210> 32
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 Glu Leu Val Phe Trp Ser Asp Val Thr Leu Asp Arg Ile Leu Arg Ala
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 Ser Pro Gly Gly Leu Ala Val Asp Trp Val
 35 40

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<400> 33
 Asp Lys Leu Tyr Trp Thr Asp Ser Gly Thr Ser Arg Ile Glu Val Ala
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 Asn Leu Asp Gly Ala His Arg Lys Val Leu Leu Trp Gln Asn Leu Glu
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 Lys Pro Arg Ala Ile Ala Leu His Pro Met
 35 40

<210> 34
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<400> 34
 Gly Thr Ile Tyr Trp Thr Asp Trp Gly Asn Thr Pro Arg Ile Glu Ala
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 Ser Ser Met Asp Gly Ser Gly Arg Arg Ile Ile Ala Asp Thr His Leu
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Phe Trp Pro Asn Gly Leu Thr Ile Asp Tyr Ala
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<400> 35
 Arg Arg Met Tyr Trp Val Asp Ala Lys His His Val Ile Glu Arg Ala
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Asn Leu Asp Gly Ser His Arg Lys Ala Val Ile Ser Gln Gly Leu Pro
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His Pro Phe Ala Ile Thr Val Phe Glu
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<400> 36
 Asp His Val Tyr Trp Thr Asp Val Ser Thr Asp Thr Ile Ser Arg Ala
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Lys Trp Asp Gly Thr Gly Gln Glu Val Val Val Asp Thr Ser Leu Glu
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Ser Pro Ala Gly Leu Ala Ile Asp Trp Val
 35 40

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<400> 37
 Asn Lys Leu Tyr Trp Thr Asp Ala Gly Thr Asp Arg Ile Glu Val Ala
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Arg Pro Arg Asp Ile Val Val Glu Pro Met
 35 40

<210> 38
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<400> 38

Gly Tyr Met Tyr Trp Thr Asp Trp Gly Ala Ser Pro Lys Ile Glu Arg
 1 5 10 15

Ala Gly Met Asp Ala Ser Gly Arg Gln Val Ile Ile Ser Ser Asn Leu
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Thr Trp Pro Asn Gly Leu Ala Ile Asp Tyr Gly
 35 40

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<213> Homo sapiens

<400> 39

Gln Arg Leu Tyr Trp Ala Asp Ala Gly Met Lys Thr Ile Glu Phe Ala
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Gly Leu Asp Gly Ser Lys Arg Lys Val Leu Ile Gly Ser Gln Leu Pro
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His Pro Phe Gly Leu Thr Leu Tyr
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<213> Homo sapiens

<400> 40

Glu Arg Ile Tyr Trp Thr Asp Trp Gln Thr Lys Ser Ile Gln Ser Ala
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Asp Arg Leu Thr Gly Leu Asp Arg Glu Thr Leu Gln Glu Asn Leu Glu
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Asn Leu Met Asp Ile His Val Phe His Arg
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<213> Homo sapiens

<400> 41

Gly Lys Val Tyr Trp Ser Asp Ser Thr Leu His Arg Ile Ser Arg Ala
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Asn Leu Asp Gly Ser Gln His Glu Asp Ile Ile Thr Thr Gly Leu Gln
 20 25 30

Thr Thr Asp Gly Leu Ala Val Asp Ala Ile
 35 40

<210> 42
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 <213> Homo sapiens

<400> 42
 Arg Lys Val Tyr Trp Thr Asp Thr Gly Thr Asn Arg Ile Glu Val Gly
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 20 25 30
 Ser Pro Arg Ala Ile Val Leu Tyr His Glu
 35 40

<210> 43
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 <212> PRT
 <213> Homo sapiens

<400> 43
 Gly Phe Met Tyr Trp Thr Asp Trp Gly Glu Asn Ala Lys Leu Glu Arg
 1 5 10 15
 Ser Gly Met Asp Gly Ser Asp Arg Ala Val Leu Ile Asn Asn Asn Leu
 20 25 30
 Gly Trp Pro Asn Gly Leu Thr Val Asp Lys Ala
 35 40

<210> 44
 <211> 38
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 <213> Homo sapiens

<400> 44
 Ser Gln Leu Leu Trp Ala Asp Ala His Thr Glu Arg Ile Glu Ala Ala
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 Asp Leu Asn Gly Ala Asn Arg His Thr Leu Val Ser Pro Val Gln His
 20 25 30
 Pro Tyr Gly Leu Thr Leu
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<210> 45
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<400> 45
 Gly Lys Val Tyr Tyr Thr Asp Val Phe Leu Asp Val Ile Arg Arg Ala
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Asp Leu Asn Gly Ser Asn Met Glu Thr Val Ile Gly Arg Gly Leu Lys
 20 25 30

Thr Thr Asp Gly Leu Ala Val Asp Trp Val
 35 40

<210> 46
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<400> 46
 Arg Asn Leu Tyr Trp Thr Asp Thr Gly Arg Asn Thr Ile Glu Ala Ser
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Arg Leu Asp Gly Ser Cys Arg Lys Val Leu Ile Asn Asn Ser Leu Asp
 20 25 30

Glu Pro Arg Ala Ile Ala Val Phe Pro Arg
 35 40

<210> 47
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 <213> Homo sapiens

<400> 47
 Gly Tyr Leu Phe Trp Thr Asp Trp Gly His Ile Ala Lys Ile Glu Arg
 1 5 10 15

Ala Asn Leu Asp Gly Ser Glu Arg Lys Val Leu Ile Asn Thr Asp Leu
 20 25 30

Gly Trp Pro Asn Gly Leu Thr Leu Asp Tyr Asp
 35 40

<210> 48
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 <212> PRT
 <213> Homo sapiens

<400> 48
 Arg Arg Ile Tyr Trp Val Asp Ala His Leu Asp Arg Ile Glu Ser Ala
 1 5 10 15

Asp Leu Asn Gly Lys Leu Arg Gln Val Leu Val Gly His Val Ser His
 20 25 30

Pro Phe Ala Leu Thr
 35

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<210> 49
<211> 36
<212> PRT
<213> Homo sapiens

<400> 49
Cys Ser Asp Phe Asn Gly Gly Cys Thr His Glu Cys Val Gln Glu Pro
1 5 10 15
Phe Gly Ala Lys Cys Leu Cys Pro Leu Gly Phe Leu Leu Ala Asn Asp
20 25 30
Ser Lys Thr Cys
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<210> 50
<211> 35
<212> PRT
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<400> 50
Cys Asp Ile Leu Gly Ser Cys Ser Gln His Cys Tyr Asn Met Arg Gly
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Ser Phe Arg Cys Ser Cys Asp Thr Gly Tyr Met Leu Glu Ser Asp Gly
20 25 30
Arg Thr Cys
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<210> 51
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<400> 51
Cys Leu Glu Asn Asn Gly Gly Cys Ser His Leu Cys Phe Ala Leu Pro
1 5 10 15
Gly Leu His Thr Pro Lys Cys Asp Cys Ala Phe Gly Thr Leu Gln Ser
20 25 30
Asp Gly Lys Asn Cys
35

<210> 52
<211> 36
<212> PRT
<213> Homo sapiens

<400> 52
Cys Thr Glu Met Pro Phe Val Cys Ser Gln Lys Cys Glu Asn Val Ile
1 5 10 15

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Gly Ser Tyr Ile Cys Lys Cys Ala Pro Gly Tyr Leu Arg Glu Pro Asp
20 25 30

Gly Lys Thr Cys
35

<210> 53
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<400> 53
Cys Met His Gly Gly Asn Cys Tyr Phe Asp Glu Thr Asp Leu Pro Lys
1 5 10 15

Cys Lys Cys Pro Ser Gly Tyr Thr Gly Lys Tyr Cys
20 25

<210> 54
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<400> 54
Gln Glu Cys Asp Ser Ala His Phe Arg Cys Gly Ser Gly His Cys Ile
1 5 10 15

Pro Ala Asp Trp Arg Cys Asp Gly Thr Lys Asp Cys Ser Asp Asp Ala
20 25 30

Asp Glu Ile Gly Cys Ala Val
35

<210> 55
<211> 41
<212> PRT
<213> Homo sapiens

<400> 55
Val Thr Cys Gln Gln Gly Tyr Phe Lys Cys Gln Ser Glu Gly Gln Cys
1 5 10 15

Ile Pro Ser Ser Trp Val Cys Asp Gln Asp Gln Asp Cys Asp Asp Gly
20 25 30

Ser Asp Glu Arg Gln Asp Cys Ser Gln
35 40

<210> 56
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<213> Homo sapiens

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<400> 56

Ser Thr Cys Ser Ser His Gln Ile Thr Cys Ser Asn Gly Gln Cys Ile
1 5 10 15

Pro Ser Glu Tyr Arg Cys Asp His Val Arg Asp Cys Pro Asp Gly Ala
20 25 30

Asp Glu Asn Asp Cys Gln Tyr
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<210> 57

<211> 37

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<213> Homo sapiens

<400> 57

Pro Thr Cys Glu Gln Leu Thr Cys Asp Asn Gly Ala Cys Tyr Asn Thr
1 5 10 15

Ser Gln Lys Cys Asp Trp Lys Val Asp Cys Arg Asp Ser Ser Asp Glu
20 25 30

Ile Asn Cys Thr Glu
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<210> 58

<211> 37

<212> PRT

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<400> 58

Cys Leu His Asn Glu Phe Ser Cys Gly Asn Gly Glu Cys Ile Pro Arg
1 5 10 15

Ala Tyr Val Cys Asp His Asp Asn Asp Cys Gln Asp Gly Ser Asp Glu
20 25 30

His Ala Cys Asn Tyr
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<210> 59

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<213> Homo sapiens

<400> 59

Pro Thr Cys Gly Gly Tyr Gln Phe Thr Cys Pro Ser Gly Arg Cys Ile
1 5 10 15

Tyr Gln Asn Trp Val Cys Asp Gly Glu Asp Asp Cys Lys Asp Asn Gly
20 25 30

Asp Glu Asp Gly Cys Glu Ser
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<210> 60
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<400> 60
 His Lys Cys Ser Pro Arg Glu Trp Ser Cys Pro Glu Ser Gly Arg Cys
 1 5 10 15
 Ile Ser Ile Tyr Lys Val Cys Asp Gly Ile Leu Asp Cys Pro Gly Arg
 20 25 30
 Glu Asp Glu Asn Asn Thr Ser Thr Gly Lys Tyr Cys Ser Met
 35 40 45

<210> 61
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<400> 61
 Glu Gln Cys Gly Leu Phe Ser Phe Pro Cys Lys Asn Gly Arg Cys Val
 1 5 10 15
 Pro Asn Tyr Tyr Leu Cys Asp Gly Val Asp Asp Cys His Asp Asn Ser
 20 25 30
 Asp Glu Gln Leu Cys Gly Thr
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<210> 62
 <211> 39
 <212> PRT
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<400> 62
 Asn Thr Cys Ser Ser Ser Ala Phe Thr Cys Gly His Gly Glu Cys Ile
 1 5 10 15
 Pro Ala His Trp Arg Cys Asp Lys Arg Asn Asp Cys Val Asp Gly Ser
 20 25 30
 Asp Glu His Asn Cys Pro Thr
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<210> 63
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 <213> Homo sapiens

<400> 63
 Ala Ser Cys Leu Asp Thr Gln Tyr Thr Cys Asp Asn His Gln Cys Ile
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Ser Lys Asn Trp Val Cys Asp Thr Asp Asn Asp Cys Gly Asp Gly Ser
 20 25 30

Asp Glu Lys Asn Cys Asn Ser
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<210> 64
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<400> 64
 Glu Thr Cys Gln Pro Ser Gln Phe Asn Cys Pro Asn His Arg Cys Ile
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Asp Leu Ser Phe Val Cys Asp Gly Asp Lys Asp Cys Val Asp Gly Ser
 20 25 30

Asp Glu Val Gly Cys Val
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<210> 65
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<400> 65
 Leu Asn Cys Thr Ala Ser Gln Phe Lys Cys Ala Ser Gly Asp Lys Cys
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Ile Gly Val Thr Asn Arg Cys Asp Gly Val Phe Asp Cys Ser Asp Asn
 20 25 30

Ser Asp Glu Ala Gly Cys Pro Thr
 35 40

<210> 66
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<400> 66
 Gly Met Cys His Ser Asp Glu Phe Gln Cys Gln Glu Asp Gly Ile Cys
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Ile Pro Asn Phe Trp Glu Cys Asp Gly His Pro Asp Cys Leu Tyr Gly
 20 25 30

Ser Asp Glu His Asn Ala Cys Val Pro
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<210> 67
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<400> 67
 Lys Thr Cys Pro Ser Ser Tyr Phe His Cys Asp Asn Gly Asn Cys Ile
 1 5 10 15
 His Arg Ala Trp Leu Cys Asp Arg Asp Asn Asp Cys Gly Asp Met Ser
 20 25 30
 Asp Glu Lys Asp Cys Pro Thr
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<210> 68
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<400> 68
 Phe Arg Cys Pro Ser Trp Gln Trp Gln Cys Leu Gly His Asn Ile Cys
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 Val Asn Leu Ser Val Val Cys Asp Gly Ile Phe Asp Cys Pro Asn Gly
 20 25 30
 Thr Asp Glu Ser Pro Leu Cys Asn Gly
 35 40

<210> 69
 <211> 41
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 <213> Homo sapiens

<400> 69
 Glu Arg Cys Gly Ala Ser Ser Phe Thr Cys Ser Asn Gly Arg Cys Ile
 1 5 10 15
 Ser Glu Glu Trp Lys Cys Asp Asn Asp Asn Asp Cys Gly Asp Gly Ser
 20 25 30
 Asp Glu Met Glu Ser Val Cys Ala Leu
 35 40

<210> 70
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 <213> Homo sapiens

<400> 70
 His Thr Cys Ser Pro Thr Ala Phe Thr Cys Ala Asn Gly Arg Cys Val
 1 5 10 15

Gln Tyr Ser Tyr Arg Cys Asp Tyr Tyr Asn Asp Cys Gly Asp Gly Ser
 20 25 30

Asp Glu Ala Gly Cys Leu Phe
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<210> 71
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 <212> PRT
 <213> Homo sapiens

<400> 71
 Arg Asp Cys Asn Ala Thr Thr Glu Phe Met Cys Asn Asn Arg Arg Cys
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Ile Pro Arg Glu Phe Ile Cys Asn Gly Val Asp Asn Cys His Asp Asn
 20 25 30

Asn Thr Ser Asp Glu Lys Asn Cys Pro Asp
 35 40

<210> 72
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 <212> PRT
 <213> Homo sapiens

<400> 72
 Arg Thr Cys Gln Ser Gly Tyr Thr Lys Cys His Asn Ser Asn Ile Cys
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Ile Pro Arg Val Tyr Leu Cys Asp Gly Asp Asn Asp Cys Gly Asp Asn
 20 25 30

Ser Asp Glu Asn Pro Thr Tyr Cys Thr Thr
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<210> 73
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 73
 His Thr Cys Ser Ser Ser Glu Phe Gln Cys Ala Ser Gly Arg Cys Ile
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Pro Gln His Trp Tyr Cys Asp Gln Glu Thr Asp Cys Phe Asp Ala Ser
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Asp Glu Pro Ala Ser Cys Gly His
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<213> Homo sapiens
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Pro Ser Glu Trp Ile Cys Asp Gly Asp Asn Asp Cys Gly Asp Met Ser
      20             25             30

Asp Glu Asp Lys Arg His Gln Cys Gln Asn
    35             40

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<213> Homo sapiens
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<400> 75
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Asp Arg Arg Cys Ile Pro Gln Ser Trp Val Cys Asp Gly Asp Val Asp
20 25 30
Cys Thr Asp Gly Tyr Asp Glu Asn Gln Asn Cys Thr Arg
35 40 45

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<210> 76
<211> 39
<212> PRT
<213> Homo sapiens
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<400> 76
Arg Thr Cys Ser Glu Asn Glu Phe Thr Cys Gly Tyr Gly Leu Cys Ile
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Pro Lys Ile Phe Arg Cys Asp Arg His Asn Asp Cys Gly Asp Tyr Ser
      20              25              30

Asp Glu Arg Gly Cys Leu Tyr
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<210> 77
<211> 41
<212> PRT
<213> Homo sapiens
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<400> 77
Gln Thr Cys Gln Gln Asn Gln Phe Thr Cys Gln Asn Gly Arg Cys Ile
1 5 10 15

Ser Lys Thr Phe Val Cys Asp Glu Asp Asn Asp Cys Gly Asp Gly Ser
 20 25 30

Asp Glu Leu Met His Leu Cys His Thr
 35 40

<210> 78

<211> 39

<212> PRT

<213> Homo sapiens

<400> 78

Pro Thr Cys Pro Pro His Glu Phe Lys Cys Asp Asn Gly Arg Cys Ile
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Glu Met Met Lys Leu Cys Asn His Leu Asp Asp Cys Leu Asp Asn Ser
 20 25 30

Asp Glu Lys Gly Cys Gly Ile
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<210> 79

<211> 41

<212> PRT

<213> Homo sapiens

<400> 79

Pro Met Cys Ser Ser Thr Gln Phe Leu Cys Ala Asn Asn Glu Lys Cys
 1 5 10 15

Ile Pro Ile Trp Trp Lys Cys Asp Gly Gln Lys Asp Cys Ser Asp Gly
 20 25 30

Ser Asp Glu Leu Ala Leu Cys Pro Gln
 35 40

<210> 80

<211> 41

<212> PRT

<213> Homo sapiens

<400> 80

Arg Phe Cys Arg Leu Gly Gln Phe Gln Cys Ser Asp Gly Asn Cys Thr
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Ser Pro Gln Thr Leu Cys Asn Ala His Gln Asn Cys Pro Asp Gly Ser
 20 25 30

Asp Glu Asp Arg Leu Leu Cys Glu Asn
 35 40

<210> 81
 <211> 41
 <212> PRT
 <213> Homo sapiens

<400> 81
 His His Cys Asp Ser Asn Glu Trp Gln Cys Ala Asn Lys Arg Cys Ile
 1 5 10 15
 Pro Glu Ser Trp Gln Cys Asp Thr Phe Asn Asp Cys Glu Asp Asn Ser
 20 25 30
 Asp Glu Asp Ser Ser His Cys Ala Ser
 35 40

<210> 82
 <211> 41
 <212> PRT
 <213> Homo sapiens

<400> 82
 Arg Thr Cys Arg Pro Gly Gln Phe Arg Cys Ala Asn Gly Arg Cys Ile
 1 5 10 15
 Pro Gln Ala Trp Lys Cys Asp Val Asp Asn Asp Cys Gly Asp His Ser
 20 25 30
 Asp Glu Pro Ile Glu Glu Cys Met Ser
 35 40

<210> 83
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 <212> PRT
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<400> 83
 Glu Phe Ser Cys Lys Thr Asn Tyr Arg Cys Ile Pro Lys Trp Ala Val
 1 5 10 15
 Cys Asn Gly Val Asp Asp Cys Arg Asp Asn Ser Asp Glu Gln Gly Cys
 20 25 30

Glu Glu

<210> 84
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<400> 84
 Arg Thr Cys His Pro Val Gly Asp Phe Arg Cys Lys Asn His His Cys
 1 5 10 15

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Ile Pro Leu Arg Trp Gln Cys Asp Gly Gln Asn Asp Cys Gly Asp Asn
20 25 30

Ser Asp Glu Glu Asn Cys Ala Pro
35 40

<210> 85
<211> 39
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<213> Homo sapiens

<400> 85
Arg Glu Cys Thr Glu Ser Glu Phe Arg Cys Val Asn Gln Gln Cys Ile
1 5 10 15

Pro Ser Arg Trp Ile Cys Asp His Tyr Asn Asp Cys Gly Asp Asn Ser
20 25 30

Asp Glu Arg Asp Cys Glu Met
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<210> 86
<211> 39
<212> PRT
<213> Homo sapiens

<400> 86
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His Ser Glu Leu Lys Cys Asp Gly Ser Ala Asp Cys Leu Asp Ala Ser
20 25 30

Asp Glu Ala Asp Cys Pro Thr
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<212> PRT
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<400> 87
Ala Tyr Cys Gln Ala Thr Met Phe Glu Cys Lys Asn His Val Cys Ile
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Pro Pro Tyr Trp Lys Cys Asp Gly Asp Asp Asp Cys Gly Asp Gly Ser
20 25 30

Asp Glu Glu Leu His Leu Cys Leu Asp
35 40

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<400> 88
 Val Pro Cys Asn Ser Pro Asn Arg Phe Arg Cys Asp Asn Asn Arg Cys
 1 5 10 15
 Ile Tyr Ser His Glu Val Cys Asn Gly Val Asp Asp Cys Gly Asp Gly
 20 25 30
 Thr Asp Glu Thr Glu Glu His Cys Arg Lys
 35 40

<210> 89
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<400> 89
 Lys Pro Cys Thr Glu Tyr Glu Tyr Lys Cys Gly Asn Gly His Cys Ile
 1 5 10 15
 Pro His Asp Asn Val Cys Asp Asp Ala Asp Asp Cys Gly Asp Trp Ser
 20 25 30
 Asp Glu Leu Gly Cys Asn Lys
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<400> 90
 Gln Arg Val Phe Trp Thr Asp Thr Val Gln Asn Lys Val Phe Ser Val
 1 5 10 15
 Asp Ile Asn Gly Leu Asn Ile Gln Glu Val Leu Asn Val Ser Val Glu
 20 25 30
 Thr Pro Glu Asn Leu Ala Val Asp Trp Val
 35 40

<210> 91
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 <213> Homo sapiens

<400> 91
 Asn Lys Ile Tyr Leu Val Glu Thr Lys Val Asn Arg Ile Asp Met Val
 1 5 10 15

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<400> 95
 Gly Tyr Leu Phe Phe Thr Asp Trp Phe Arg Pro Ala Lys Ile Met Arg
 1 5 10 15
 Ala Trp Ser Asp Gly Ser His Leu Leu Pro Val Ile Asn Thr Thr Leu
 20 25 30
 Gly Trp Pro Asn Gly Leu Ala Ile Asp Trp Ala
 35 40

<210> 96
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 <213> Homo sapiens

<400> 96
 Gly Arg Ile Phe Trp Ser Asp Ala Thr Gln Gly Lys Thr Trp Ser Ala
 1 5 10 15
 Phe Gln Asn Gly Thr Asp Arg Arg Val Val Phe Asp Ser Ser Ile Ile
 20 25 30
 Leu Thr Glu Thr Ile Ala Ile Asp Trp Val
 35 40

<210> 97
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<400> 97
 Arg Asn Leu Tyr Trp Thr Asp Tyr Ala Leu Glu Thr Ile Glu Val Ser
 1 5 10 15
 Lys Ile Asp Gly Ser His Arg Thr Val Leu Ile Ser Lys Asn Leu Thr
 20 25 30
 Asn Pro Arg Gly Leu Ala Leu Asp Pro Arg
 35 40

<210> 98
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<400> 98
 His Leu Leu Phe Trp Ser Asp Trp Gly His His Pro Arg Ile Glu Arg
 1 5 10 15

Ala Ser Met Asp Gly Ser Met Arg Thr Val Ile Val Gln Asp Lys Ile
 20 25 30

Phe Trp Pro Cys Gly Leu Thr Ile Asp Tyr Pro
 35 40

<210> 99

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<400> 99

Gly Lys Leu Tyr Trp Ser Asp Gln Gly Thr Asp Ser Gly Val Pro Ala
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Lys Ile Ala Ser Ala Asn Met Asp Gly Thr Ser Val Lys Thr Leu Phe
 20 25 30

Thr Gly Asn Leu Glu His Leu Glu Cys Val Thr Leu Asp Ile Glu
 35 40 45

<210> 100

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<400> 100

Gln Lys Leu Tyr Trp Ala Val Thr Gly Arg Gly Val Ile Glu Arg Gly
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Asn Val Asp Gly Thr Asp Arg Met Ile Leu Val His Gln Leu Ser His
 20 25 30

Pro Trp Gly Ile Ala Val His
 35

<210> 101

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<400> 101

Arg Tyr Leu Phe Trp Ala Asp Tyr Gly Gln Arg Pro Lys Ile Glu Arg
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Ser Phe Leu Asp Cys Thr Asn Arg Thr Val Leu Val Ser Glu Gly Ile
 20 25 30

Val Thr Pro Arg Gly Leu Ala Val Asp Arg Ser
 35 40

<210> 102
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<400> 102
 Gly Tyr Leu Tyr Trp Ala Asp Trp Asp Thr His Ala Lys Ile Glu Arg
 1 5 10 15
 Ala Thr Leu Gly Gly Asn Phe Arg Val Pro Ile Val Asn Ser Ser Leu
 20 25 30
 Val Met Pro Ser Gly Leu Thr Leu Asp Tyr Glu
 35 40

<210> 103
 <211> 39
 <212> PRT
 <213> Homo sapiens

<400> 103
 Asp Leu Leu Tyr Trp Val Asp Ala Ser Leu Gln Arg Ile Glu Arg Ser
 1 5 10 15
 Thr Leu Thr Gly Val Asp Arg Glu Val Ile Val Asn Ala Ala Val His
 20 25 30
 Ala Phe Gly Leu Thr Leu Tyr
 35

<210> 104
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 104
 Lys Arg Leu Tyr Trp Ile Asp Thr Gln Arg Gln Val Ile Glu Arg Met
 1 5 10 15
 Phe Leu Asn Lys Thr Asn Lys Glu Thr Ile Ile Asn His Arg Leu Pro
 20 25 30
 Ala Ala Glu Ser Leu Ala Val Asp Trp Val
 35 40

<210> 105
 <211> 50
 <212> PRT
 <213> Homo sapiens

<400> 105
 Arg Lys Leu Tyr Trp Leu Asp Ala Arg Leu Asp Gly Leu Phe Val Ser
 1 5 10 15

Asp Leu Asn Gly Gly His Arg Arg Met Leu Ala Gln His Cys Val Asp
 20 25 30

Ala Asn Asn Thr Phe Cys Phe Asp Asn Pro Arg Gly Leu Ala Leu His
 35 40 45

Pro Gln
 50

<210> 106
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 106
 Gly Tyr Leu Tyr Trp Ala Asp Trp Gly His Arg Ala Tyr Ile Gly Arg
 1 5 10 15

Val Gly Met Asp Gly Thr Asn Lys Ser Val Ile Ile Ser Thr Lys Leu
 20 25 30

Glu Trp Pro Asn Gly Ile Thr Ile Asp Tyr Thr
 35 40

<210> 107
 <211> 41
 <212> PRT
 <213> Homo sapiens

<400> 107
 Asp Leu Leu Tyr Trp Ala Asp Ala His Leu Gly Tyr Ile Glu Tyr Ser
 1 5 10 15

Asp Leu Glu Gly His His Arg His Thr Val Tyr Asp Gly Ala Leu Pro
 20 25 30

His Pro Phe Ala Ile Thr Ile Phe Glu
 35 40

<210> 108
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 108
 Asp Thr Ile Tyr Trp Thr Asp Trp Asn Thr Arg Thr Val Glu Lys Gly
 1 5 10 15

Asn Lys Tyr Asp Gly Ser Asn Arg Gln Thr Leu Val Asn Thr Thr His
 20 25 30

Arg Pro Phe Asp Ile His Val Tyr His Pro
 35 40

<210> 109
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 109
 Arg His Ile Tyr Trp Ser Asp Val Lys Asn Lys Arg Ile Glu Val Ala
 1 5 10 15
 Lys Leu Asp Gly Arg Tyr Arg Lys Trp Leu Ile Ser Thr Asp Leu Asp
 20 25 30
 Gln Pro Ala Ala Ile Ala Val Asn Pro Lys
 35 40

<210> 110
 <211> 43
 <212> PRT
 <213> Homo sapiens

<400> 110
 Gly Leu Met Phe Trp Thr Asp Trp Gly Lys Glu Pro Lys Ile Glu Ser
 1 5 10 15
 Ala Trp Met Asn Gly Glu Asp Arg Asn Ile Leu Val Phe Glu Asp Leu
 20 25 30
 Gly Trp Pro Thr Gly Leu Ser Ile Asp Tyr Leu
 35 40

<210> 111
 <211> 30
 <212> PRT
 <213> Homo sapiens

<400> 111
 Asp Arg Ile Tyr Trp Ser Asp Phe Lys Glu Asp Val Ile Glu Thr Ile
 1 5 10 15
 Lys Tyr Asp Gly Thr Asp Arg Arg Val Ile Ala Lys Glu Ala
 20 25 30

<210> 112
 <211> 35
 <212> PRT
 <213> Homo sapiens

<400> 112
 Cys Leu His Asn Asn Gly Gly Cys Ser His Ile Cys Thr Asp Leu Lys
 1 5 10 15
 Ile Gly Phe Glu Cys Thr Cys Pro Ala Gly Phe Gln Leu Leu Asp Gln
 20 25 30

Lys Thr Cys
35

<210> 113
<211> 39
<212> PRT
<213> Homo sapiens

<400> 113
Lys Asp Cys Glu Lys Asp Gln Phe Gln Cys Arg Asn Glu Arg Cys Ile
1 5 10 15

Pro Ser Val Trp Arg Cys Asp Glu Asp Asp Asp Cys Leu Asp His Ser
20 25 30

Asp Glu Asp Asp Cys Pro Lys
35

<210> 114
<211> 39
<212> PRT
<213> Homo sapiens

<400> 114
Gly Thr Cys Arg Gly Asp Glu Phe Gln Cys Gly Asp Gly Thr Cys Val
1 5 10 15

Leu Ala Ile Lys His Cys Asn Gln Glu Gln Asp Cys Pro Asp Gly Ser
20 25 30

Asp Glu Ala Gly Cys Leu Gln
35

<210> 115
<211> 39
<212> PRT
<213> Homo sapiens

<400> 115
Lys Glu Cys Glu Lys Asp Gln Phe Gln Cys Arg Asn Glu Arg Cys Ile
1 5 10 15

Pro Ser Val Trp Arg Cys Asp Glu Asp Asp Asp Cys Leu Asp His Ser
20 25 30

Asp Glu Asp Asp Cys Pro Lys
35

<210> 116
<211> 41
<212> PRT
<213> Homo sapiens

<400> 116

Lys Thr Cys Ala Asp Ser Asp Phe Thr Cys Asp Asn Gly His Cys Ile
 1 5 10 15

His Glu Arg Trp Lys Cys Asp Gly Glu Glu Glu Cys Pro Asp Gly Ser
 20 25 30

Asp Glu Ser Glu Ala Thr Cys Thr Lys
 35 40

<210> 117

<211> 28

<212> PRT

<213> Homo sapiens

<400> 117

Ser His Lys Cys Val Pro Ala Ser Trp Arg Cys Asp Gly Glu Lys Asp
 1 5 10 15

Cys Glu Gly Gly Ala Asp Glu Ala Gly Cys Ala Thr
 20 25

<210> 118

<211> 37

<212> PRT

<213> Homo sapiens

<400> 118

Cys Ala Pro His Glu Phe Gln Cys Gly Asn Arg Ser Cys Leu Ala Ala
 1 5 10 15

Val Phe Val Cys Asp Gly Asp Asp Asp Cys Gly Asp Gly Ser Asp Glu
 20 25 30

Arg Gly Cys Ala Asp
 35

<210> 119

<211> 44

<212> PRT

<213> Homo sapiens

<400> 119

Pro Ala Cys Gly Pro Arg Glu Phe Arg Cys Gly Gly Asp Gly Gly Gly
 1 5 10 15

Ala Cys Ile Pro Glu Arg Trp Val Cys Asp Arg Gln Phe Asp Cys Glu
 20 25 30

Asp Arg Ser Asp Glu Ala Ala Glu Leu Cys Gly Arg
 35 40

<210> 120
 <211> 40
 <212> PRT
 <213> Homo sapiens

<400> 120
 Ala Ala Cys Ala Thr Val Ser Gln Phe Ala Cys Arg Ser Gly Glu Cys
 1 5 10 15
 Val His Leu Gly Trp Arg Cys Asp Gly Asp Arg Asp Cys Lys Asp Lys
 20 25 30
 Ser Asp Glu Ala Asp Cys Pro Leu
 35 40

<210> 121
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 121
 Asn Arg Ile Tyr Trp Cys Asp Leu Ser Tyr Arg Lys Ile Tyr Ser Ala
 1 5 10 15
 Tyr Met Asp Lys Ala Ser Asp Pro Lys Glu Gln Glu Val Leu Ile Asp
 20 25 30
 Glu Gln Leu His Ser Pro Glu Gly Leu Ala Val Asp Trp Val
 35 40 45

<210> 122
 <211> 46
 <212> PRT
 <213> Homo sapiens

<400> 122
 Asn Arg Ile Tyr Trp Cys Asp Leu Ser Tyr Arg Lys Ile Tyr Ser Ala
 1 5 10 15
 Tyr Met Asp Lys Ala Ser Asp Pro Lys Glu Arg Glu Val Leu Ile Asp
 20 25 30
 Glu Gln Leu His Ser Pro Glu Gly Leu Ala Val Asp Trp Val
 35 40 45

<210> 123
 <211> 42
 <212> PRT
 <213> Homo sapiens

<400> 123
 Lys His Ile Tyr Trp Thr Asp Ser Gly Asn Lys Thr Ile Ser Val Ala
 1 5 10 15

Thr Val Asp Gly Gly Arg Arg Arg Thr Leu Phe Ser Arg Asn Leu Ser
20 25 30

Glu Pro Arg Ala Ile Ala Val Asp Pro Leu
35 40

<210> 124

<211> 43

<212> PRT

<213> Homo sapiens

<400> 124

Gly Phe Met Tyr Trp Ser Asp Trp Gly Asp Gln Ala Lys Ile Glu Lys
1 5 10 15

Ser Gly Leu Asn Gly Val Asp Arg Gln Thr Leu Val Ser Asp Asn Ile
20 25 30

Glu Trp Pro Asn Gly Ile Thr Leu Asp Leu Leu
35 40

<210> 125

<211> 43

<212> PRT

<213> Homo sapiens

<400> 125

Gln Arg Leu Tyr Trp Val Asp Ser Lys Leu His Gln Leu Ser Ser Ile
1 5 10 15

Asp Phe Ser Gly Gly Asn Arg Lys Thr Leu Ile Ser Ser Thr Asp Phe
20 25 30

Leu Ser His Pro Phe Gly Ile Ala Val Phe Glu
35 40

<210> 126

<211> 42

<212> PRT

<213> Homo sapiens

<400> 126

Asp Lys Val Phe Trp Thr Asp Leu Glu Asn Glu Ala Ile Phe Ser Ala
1 5 10 15

Asn Arg Leu Asn Gly Leu Glu Ile Ser Ile Leu Ala Glu Asn Leu Asn
20 25 30

Asn Pro His Asp Ile Val Ile Phe His Glu
35 40

32/32

<210> 127
<211> 4
<212> PRT
<213> Homo sapiens

<400> 127
Tyr Trp Thr Asp
1